

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Bath Iron Works Corporation, Hardings Facility Cumberland County Brunswick, Maine A-271-71-M-A Departmental
Findings of Fact and Order
Air Emission License
Amendment #1

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Bath Iron Works Corporation, Hardings Facility (BIW) was issued an Air Emission License A-271-71-L-R on January 31, 2013, for the operation of emission sources associated with their shipbuilding prefabrication facility.

BIW has requested an amendment to their license to construct a new Blast and Paint Building with the installation of associated lines and equipment. Once the new building is constructed and the equipment is fully operational, the existing Blast and Paint Building with its associated lines and equipment shall be removed and/or dismantled.

In addition, the following updates were made as part of this amendment:

- an update to the fuel sulfur content requirements, based on Maine statute changes; and
- an update to the annual emission statement language to include the Hazardous Air Pollutants (HAP) emissions reporting requirement.

The equipment in this license is located at Bath Road, Brunswick, Maine.

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B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

Fuel Burning Equipment

<u>Equipment</u>	Maximum Capacity (MMBtu/hr)	Fuel Type, <u>%Sulfur</u>	Maximum Firing <u>Rate</u>	Date of <u>Installation</u>	Stack #
New Equipment				•	
Preheat Oven #1	4.0	Natural Gas	67 scfm	2018	#2
(below Rec. Blower)					
Preheat Oven #2 (Beneath	4.0	Natural Gas	67 scfm	2018	#2
Rollers)					
Drying Oven	4.0	Natural Gas	67 scfm	2018	#4
Existing Equipment					
*Blast and Paint Heater	5.5	Natural Gas	90 scfm	1989	A.V.

^{*} To be removed A.V. = Ambient Vent

Process Equipment

Equipment	Max.Raw Material Process Rate	Max. Finished Material Process Rate	Pollution Control Equipment	Stack #
New Equipment	Rate	Atuto	<u> </u>	O CONTRACTOR OF THE PARTY OF TH
Blast Line (New Building)	350,000 lb/hr	6-10 FPM for steel plates and structural shapes	Dust Collection System	#1
Paint Line (New Building)	0.25 gal/hr	6-10 FPM for steel plates and structural shapes	3 levels of Fabric Filter for PM	#3
Existing Equipment				
*Blast Line (building 0741)	252,000 lb/hr	7 ft/min (plate) 4.5 ft/min (shapes)	Torit Dust Collector	A.V.
*Paint Line (building 0741)	0.22 gal/min	7 ft/min (plate) 4.5 ft/min (shapes)	fabric filter	A.V.

^{*}to be removed

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C. Definitions

<u>Distillate Fuel</u>. For the purposes of this license, distillate fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- · Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- · Kerosene, as defined in ASTM D3699;
- · Biodiesel, as defined in ASTM D6751; or
- · Biodiesel blends, as defined in ASTM D7467.

<u>Dry abrasive blasting</u> means cleaning, polishing, conditioning, removing or preparing a surface by propelling a stream of abrasive material with compressed air against the surface. Hydroblasting, wet abrasive blasting, or other abrasive blasting operations which employ liquids to reduce emissions are not dry abrasive blasting. [40 C.F.R. § 63.11522]

Metal fabrication and finishing HAP (MFHAP) means any compound of the following metals: cadmium, chromium, lead, manganese, or nickel, or any of these metals in the elemental form, with the exception of lead. [40 C.F.R. § 63.11522]

Material containing MFHAP means a material containing one or more MFHAP, i.e. any material that contains cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Safety Data Sheet for the material, is a material containing MFHAP. [40 C.F.R. § 63.11522]

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100.

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The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

	Current License	Future License	Net Change	Significant
<u>Pollutant</u>	(TPY)	(TPY)	<u>(TPY)</u>	Emission Levels
PM	15.5	18.2	2.7	100
PM ₁₀	15.5	18.2	2.7	100
SO_2	17.7	17.7	0.0	100
NO _x	33.5	38.6	5.1	100
CO	13.9	18.9	5.0	100
VOC	36.0	36.2	0.2	50
CO ₂ e	<100,000	<100,000	<100,000	100,000

This modification is determined to be a minor modification and has been processed as such.

E. Facility Classification

With the annual fuel limit of 475,000 gallons per year of distillate fuel fired in the boilers and a facility wide VOC limit of 35 tpy on the process equipment, and HAP emission limits of 9.9 tpy for a single HAP and 24.9 tpy of a combination of HAP, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the major source thresholds for criteria pollutants; and
- As an area source of HAP, because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

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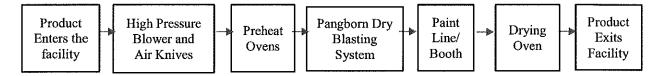
B. Process Description

BIW intends to construct a new building to house the Blast and Paint Lines. New equipment includes two preheat ovens and a drying oven as well as the new Blast and Paint Lines. This equipment will eventually replace the existing equipment. However, the existing building and equipment will be in operation until the new equipment is tested and is fully operational. The estimated amount of time in which both the old and new equipment will operate concurrently is not expected to exceed six months.

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C. Process Equipment and Emissions

Below is a process flow diagram showing the sequence of activities in the New Blast and Paint building:



1. High Pressure Blower and Air Knives

Unpainted metal is conveyed from outdoor storage into the New Blast and Paint Building. High pressure blowers and air knives are used to remove standing water and moisture from the steel pieces. PM emissions from this step are expected to be negligible.

2. Preheat Ovens

The dry steel enters Pre-heat Oven #1 and #2 to be warmed to between 50 °F to 100 °F prior to painting. Only emissions from natural gas combustion are expected in this step. Combustion emissions are discussed in the next section.

3. Blast Line

The heated metal proceeds to the Pangborn Dry Blasting system. The system consists of a centrifugal abrasive blast machine where metal is blasted to a specified level of cleanliness. The unit is equipped with a dust collection system located outside the building.

The proposed BACT for PM emissions control is as follows:

- a. The Blast Line shall vent to a Pangborn dust collection system, consisting of 24 ultra-web cartridges containing paper filter media rated at 99.99% efficient for capturing particulate ≥ 0.5 micron in size. An air pulsing system, initiated by a differential pressure control unit, shall clean the filters. The dust collection system is located outside the building.
- b. BIW shall keep a log recording maintenance on the Blast Line and dust collector.

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BACT shall be venting the Blast Line emissions to the Pangborn dust collection system and operating and maintaining the system per the manufacturer's recommendations and recording maintenance on the Panghorn dust collection system.

4. Paint Line/Booth

The Material proceeds into an automated spray paint booth, to be coated with a specified coating (a weldable pre-construction primer / Sigmaweld MC or equal meeting Navy specifications). The following is proposed as BACT for PM resulting from overspray.

- a. The Paint Line/Booth shall include and vent to an enclosed cross draft, dry filter system consisting of hanging Teflon coated baffles followed by three levels of filtration. The first level consists of 3-ply polyester filtration utilizing impingement, interception and strainer principles to control particulate emissions, followed by a two-stage high capacity filter mesh. The final level includes Tri-Cube 3-ply filter bags.
- b. The Paint Line/Booth shall utilize spray guns which are interlocked to only operate when booth fans are in operation with the access doors closed. Spray guns are airless guns with reversible tips.
- c. BIW shall keep a log recording maintenance of the Paint Line/Booth (including filter changes).

BACT is the use paints that do not contain MFHAP and the use of the cross draft, dry filter system when spraying paint. BIW shall operate and maintain the system per manufacturer's recommendations. The Paint Line/Booth and spray guns shall be operated and maintained per manufacturer's recommendations.

5. Drying Oven

The painted metal is then conveyed to the Drying Oven to be dried and cured. VOC emissions from the drying paint is expected in addition to the Drying Oven combustion emissions. VOC process emissions are not expected to increase because of the new building and equipment and will continue to be subject to the facility wide VOC limit. Combustion emissions are discussed in the next section.

6. VOC and HAP emissions from Process Equipment

- a. BIW shall be limited to 35 ton of VOC emitted from the process equipment on a 12-month rolling total basis. Compliance shall be based on purchase/use records and the manufacturer's data documenting the VOC content of each coating/thinner.
- b. BIW shall be limited to 9.9 tons of any single HAP and 24.9 tons of combined HAPs on a 12-month rolling total basis. Compliance shall be based on purchase/use records and the manufacturer's data documenting the HAP content of each coating/thinner.
- 7. Visible Emissions from general process sources, including the new Blast Line and the new Paint Line/Booth shall not exceed an opacity of 20% on a six (6) minute block average basis.

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D. Preheat Oven #1, Preheat Oven #2, and Drying Oven (Combustion Emissions)

The new Blast and Paint Building will have two preheat ovens and a drying oven; the three ovens are each rated at 4.0 MMBtu/hr firing natural gas.

1. BACT Findings

The BACT emission limits for the two preheat ovens and the drying oven are based on the following:

Natural gas

PM/PM₁₀ - 0.05 lb/MMBtu based on 06-096 C.M.R. 115, BACT SO₂ - 0.6 lb/MMscf: AP-42, Table 1.4-2 (dated 7/98)

NO_x - 100 lb/MMscf: AP-42, Table 1.4-1 (dated 7/98)

CO - 84 lb/MMscf: AP-42, Table 1.4-1 (dated 7/98) VOC - 5.5 lb/MMscf: AP-42, Table 1.4-2 (dated 7/98)

Opacity – Visible emissions from the units firing natural gas shall not exceed an opacity of 10% on a 6-minute block average basis.

The BACT emission limits are as follows:

Unit	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Preheat Oven #1 (4.0 MMBtu/hr)	0.20	0.20	0.01	1.70	1.43	0.28
Preheat Oven #2 (4.0 MMBtu/hr)	0.20	0.20	0.01	1.70	1.43	0.28
Drying Oven (4 MMBtu/hr)	0.20	0.20	0.01	1.70	1.43	0.28

Potential VOC process emissions from the Preheat Ovens and Drying Oven are discussed in Section II C.

2. Periodic Monitoring

Periodic monitoring for the Preheat Oven #1, Preheat Oven #2, and the Drying Oven shall include recordkeeping to document natural gas use both on a monthly and 12 month rolling total basis.

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3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the size of the Preheat Oven #1, Preheat Oven #2 and the Drying Oven, and because they are not steam generating units, they are not subject to the New Source Performance Standards (NSPS) 40 C.F.R. Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

The Preheat Oven #1, Preheat Oven #2, and the Drying Oven are not subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 C.F.R. Part 63, Subpart JJJJJJ. The units do not heat water to recover thermal energy, thus do not meet the definition of "boiler" in this subpart. In this subpart, a "boiler" is defined as an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water.

In addition, the units are gas-fired; gas-fired boilers are not subject to the subpart. [40 C.F.R. §§63.11195 and 63.11237]

E. 40 C.F.R. Part 63, Subpart XXXXXX

BIW is subject to 40 C.F.R. Part 63 Subpart XXXXXX, National *Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories*.

BIW performs the following processes that are subject to this rule:

- Dry Abrasive Blasting
- o Dry Machining
- Welding

However, only Dry Abrasive Blasting shall be occurring in the new building (dry machining and welding will continue to be performed, as currently licensed, in the existing part of the facility). Therefore, only Dry Abrasive Blasting will be discussed in this amendment. Although BIW does paint metal components, the paint utilized does not meet the definition of a "Material containing MFHAP". Therefore, BIW is not subject to the painting related requirements in Subpart XXXXXX.

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Dry Abrasive Blasting

- 1. BIW must comply with all of the following Dry Abrasive Blasting management practices [40 C.F.R. § 63.11516 (a)]:
 - a. Minimize dust generation during emptying of abrasive blasting enclosures to reduce MFHAP emissions, as practicable.
 - b. Operate all equipment associated with dry abrasive blasting operations according to the manufacturer's instructions.
 - c. Minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable.
 - d. Enclose dusty abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive materials.
 - e. Dry abrasive media is not to be reused if contaminated (i.e. any materials other than the base metal such as paint residue) unless the contaminants have been removed by filtration or screening, and the abrasive materials conforms to its original size.
 - f. Whenever practicable, BIW shall switch from high particulate matter (PM)-emitting blast media (e.g., sand) to low PM-emitting blast media (e.g., crushed glass, specular hematite, steel shot, aluminum oxide).

2. Reporting and Recordkeeping

BIW is subject to the notification, recordkeeping and reporting requirements per 40 C.F.R. § 63.11519. Since the new Blast Line is a new affected source, BIW shall submit an initial notification and a Notification of Compliance Status within 120 days of installation for the new Blast Line. Annual certification and compliance reports are required per § 63.11519 (b)(1).

- a. The Initial Notification shall contain the information specified below:
 - (1) The name, address, phone number and e-mail address of the owner and operator;
 - (2) The address (physical location) of the affected source:
 - (3) An identification of the relevant standard (i.e., this subpart); and
 - (4) A brief description of the type of operation. For example, a brief characterization of the types of products (e.g., aerospace components, sports equipment, etc.), the number and type of processes, and the number of workers usually employed.

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- b. The Notification of Compliance Status shall contain the information below:
 - (1) The company's name and address;
 - (2) A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart;
 - (3) The date of the notification of compliance status.
- c. Annual certification and compliance reports are required per 63.11519 (b)(1).
- F. 40 C.F.R. Part 63, Subpart II; National Emission Standards for Hazardous Air Pollutants (NESHAP) for Shipbuilding and Ship Repair (Surface Coating) Operations.

No provisions of 40 C.F.R. Part 63, Subpart II apply to the BIW emission sources because Subpart II applies to shipbuilding facilities which are major sources of HAP. BIW is limited to 9.9 tpy of one HAP or 24.9 tpy of a combined total HAP making this facility an area source of HAP.

G. 06-096 C.M.R. ch. 129 - Surface Coating Facilities

This regulation establishes requirements for consistent requirements for testing, evaluating and limiting emission of volatile organic compounds (VOC) and Hazardous Air Pollutants (HAP) from selected surface coating operations. This facility produces major marine vessel subassemblies which are exposed to the exterior of the vessel therefore not subject because it is exempted to this regulation per Section 1.E.(3)(e).

H. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

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I. Emissions Statement

BIW is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. BIW shall maintain the following records in order to comply with this rule:

- 1. The amount of distillate fuel fired in Boiler #1, Boiler #2, Boiler #3, the Hot Air Furnace, and the Heat Treat Furnace (each) on a monthly basis;
- 2. The sulfur content of the distillate fuel fired in Boiler #1, Boiler #2, Boiler #3, the Heat Treat Furnace and the Hot Air Furnace (each);
- 3. The amount of natural gas fired in Boiler #3, Blast and Paint Heater, Preheat Oven, Cure Oven, Batch Oven, the new equipment consisting of Preheat Oven #1, Preheat Oven #2 and the Drying Oven on a monthly basis;
- 4. Calculations of the VOC and/or HAP emissions from the VOC/HAP emitting processes, including paint booths, welding, machining, blasting, solvents/thinners, etc. on a calendar year total basis; and
- 5. Hours of operation for each emission unit on a monthly basis. [06-096 C.M.R. ch. 137]

In reporting year 2020 and every third year thereafter, BIW shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. BIW shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

J. Annual Emissions

BIW has the following annual emissions, based on the following fuel uses and process emissions (all based on a 12 month rolling total):

- 1. 475,000 gallons of distillate fuel used with a maximum sulfur content not to exceed 0.5% by weight (0.0015% S after July 1, 2018).
- 2. 8,760 hours of distillate fuel use in the Hot Air Furnace with a sulfur content not to exceed 0.15% by weight (0.0015% S after July 1, 2018).
- 3. 8,760 hours of natural gas use in natural gas fired units, including the worst case scenario of Boiler #3 firing only natural gas.
- 4. VOC emissions from the process equipment shall not exceed 35.0 tons/year.
- 5. BIW shall be limited to 9.9 tons of any single HAP and 24.9 tons of combined HAP.

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Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	PM	PM ₁₀	SO_2	NO _x	CO	VOC
Total distillate fuel	6.51	6.51	16.74	14.84	1.19	0.05
Boiler #3, natural gas	5.50	5.50	0.06	10.67	8.97	0.59
Hot Air Furnace	0.66	0.66	0.85	2.50	0.20	0.01
New Preheat Oven #1	0.88	0.88	0.01	1.7	1.43	0.09
New Preheat Oven #2	0.88	0.88	0.01	1.7	1.43	0.09
New Drying Oven	0.88	0.88	0.01	1.7	1.43	0.09
Blast Heater	1.20	1.20	0.01	2.34	1.80	0.13
Preheat Oven	0.44	0.44	0.01	0.85	0.65	0.05
Cure Oven	0.66	0.66	0.01	1.28	0.98	0.07
Batch Oven	0.55	0.55	0.01	1.06	0.82	0.06
Process						35.0
Equipment						
Total TPY	18.2	18.2	17.7	38.6	18.9	36.2

Annual HAP Emission Limits

Pollutant	Tons/year
Single HAP	9,9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

<u>Pollutant</u>	Tons/Year
PM ₁₀	25
SO_2	50
NO _x	50
CO	250

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The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-271-71-M-A subject to the conditions found in Air Emission License A-271-71-L-R, and the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

The following replaces Condition (16) D. and E. in A-271-71-L-R (2/1/2013)

- (16) Fuel Use Limits
 - D. Prior to July 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]
 - E. Beginning July 1, 2018, the facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]

The following condition replaces Condition (24) in A-271-71-L-R (2/1/2013)

- (24) Annual Emission Statement
 - A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, BIW shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

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- B. BIW shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 - 1. The amount of distillate fuel fired in Boiler #1, Boiler #2, Boiler #3, the Hot Air Furnace and the Heat Treat Furnace (each) on a monthly basis;
 - 2. The sulfur content of the distillate fuel fired in Boiler #1, Boiler #2, Boiler #3, the Hot Air Furnace, and the Heat Treat Furnace (each);
 - 3. The amount of natural gas fired in Boiler #3, Blast and Paint Heater, Preheat Oven, Cure Oven, Batch Oven, the new equipment consisting of Preheat Oven #1, Preheat Oven #2 and the Drying Oven on a monthly basis;
 - 4. Calculations of the VOC and/or HAP emissions from the VOC/HAP emitting processes, including paint booths, welding, machining, blasting, solvents/thinners, etc. on a calendar year total basis; and
 - 5. Hours of operation for each emission unit on a monthly basis. [06-096 C.M.R. ch. 137]
- C. In reporting year 2020 and every third year thereafter, BIW shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). BIW shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A (3). [38 M.R.S. § 353-A(1-A)]

The following Conditions are new Conditions in A-271-71-L-R (2/1/2013)

(26) Preheat Oven #1, Preheat Oven #2, and Drying Oven (New Building)

Emissions from Preheat Oven #1, Preheat Oven #2 and Drying Oven located in the new Blast and Paint Building constructed in 2018 shall not exceed the following when firing natural gas:

[06-096 C.M.R. 115, BACT]

A. Emissions shall not exceed the following:

<u>Unit</u>	Pollutant	lb/MMBtu	Origin and Authority
Preheat Oven #1	PM	0.05	06-096 C.M.R. ch. 115, BACT
Preheat Oven #2	PM	0.05	06-096 C.M.R. ch. 115, BACT
Drying Oven	PM	0.05	06-096 C.M.R. ch. 115, BACT

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B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Preheat Oven #1	0.20	0.20	0.01	0.39	0.33	0.02
Preheat Oven #2	0.20	0.20	0.01	0.39	0.33	0.02
Drying Oven	0.20	0.20	0.01	0.39	0.33	0.02

- C. Visible emissions from the Preheat Oven #1, Preheat Oven #2 and the Drying Oven shall each not exceed an opacity of 10 percent on a six (6) minute block average basis. [06-096 C.M.R. 115, BACT]
- D. Periodic monitoring for the Preheat Oven #1, Preheat Oven #2, and the Drying Oven shall include recordkeeping to document natural gas use both on a monthly and 12-month rolling total basis.

(27) Process Equipment

- A. Blast Line [06-096 C.M.R. 115, BACT]
 - 1. Operations shall occur in vented enclosures controlled with filtration devices.
 - 2. The Blast Line shall vent to a Panghorn dust collection system.
 - 3. BIW shall keep a maintenance log recording the date and location of all routine maintenance on the Blast Line and dust collection system.
- B. Paint Line/Booth [06-096 C.M.R. 115, BACT]
 - 1. The Paint Line/Booth shall vent through a fabric filter to control particulate emissions.
 - 2. BIW shall keep a maintenance log recording all routine maintenance of the Paint Line/Booth and the filter system including filter changes.
 - 3. The Paint Line/Booth and spray guns shall be operated and maintained per manufacturer's recommendations.
- C. Visible Emissions from general process sources, including the Blast Line and the Paint Line/Booth shall not exceed an opacity of 20% on a six (6) minute block average basis.
- (28) 40 C.F.R. Part 63, Subpart XXXXXX

BIW shall comply with the requirements of 40 C.F.R. Part 63, Subpart XXXXXX, National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories.

A. BIW must comply with all of the following Dry Abrasive Blasting management practices [40 C.F.R. §63.11516 (a)]:

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- 1. Minimize dust generation during emptying of abrasive blasting enclosures to reduce MFHAP emissions, as practicable.
- 2. Operate all equipment associated with dry abrasive blasting operations according to the manufacturer's instructions.
- 3. Minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable.
- 4. Enclose dusty abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive materials.
- 5. Dry abrasive media is not to be reused if contaminated (i.e. any materials other than the base metal such as paint residue) unless the contaminants have been removed by filtration or screening, and the abrasive materials conforms to its original size.
- 6. Whenever practicable, BIW shall switch from high particulate matter (PM)-emitting blast media (e.g., sand) to low PM-emitting blast media (e.g., crushed glass, specular hematite, steel shot, aluminum oxide).

B. Reporting and Recordkeeping

BIW is subject to the notification, recordkeeping and reporting requirements per 40 C.F.R. § 63.11519. Since the new Blast Line is a new affected source, BIW shall submit an initial notification and a Notification of Compliance Status within 120 days of the initial startup for the new Blast Line. Annual certification and compliance reports are required per § 63.11519 (b)(1).

- 1. The Initial Notification shall provide the following information: [40 C.F.R. § 63.11519 (a)(1)(i) (iv)]
 - a. The name, address, phone number and e-mail address of the owner and operator;
 - b. The address (physical location) of the affected source;

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- c. An identification of the relevant standard (i.e., this subpart); and
- d. A brief description of the type of operation. For example, a brief characterization of the types of products (e.g., aerospace components, sports equipment, etc.), the number and type of processes, and the number of workers usually employed.

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- 2. BIW's Notification of Compliance Status shall contain the following information: [40 C.F.R. § 63.11519 (a)(2)(i) (iv)]
 - a. The company's name and address;
 - b. A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart; and
 - c. The date of the notification of compliance status.
- 3. BIW shall submit Annual certification and compliance reports per 40 C.F.R. § 63.11519 (b).
- (29) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 22 DAY OF June, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-271-71-L-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 4/10/2018

Date of application acceptance: 4/11/2018

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

FIED

JUN 2 2 2018

State of Maine
Board of Environmental Protection